



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,585	03/29/2004	John L. McNeely	0716-01001	3208
26659	7590	05/19/2006		
RAGGIO & DINNIN, P.C. 2701 CAMBRIDGE COURT, STE. 410 AUBURN HILLS, MI 48326			EXAMINER ROSSI, JESSICA	
			ART UNIT	PAPER NUMBER

1733

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/812,585	Applicant(s) MCNEELY ET AL	
	Examiner Jessica L. Rossi	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/10/06, Amendment.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-16 and 18-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-16 and 18-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment dated 3/10/06. Claim 17 was cancelled and its limitations were incorporated into claim 11. Claims 11-16 and 18-23 are pending.
2. The rejection of claim 11 as being anticipated by Jessup et al. '875 under 35 USC 102(b), as set forth in paragraph 6 of the previous action, has been withdrawn in light of the present amendment.
3. The rejection of claim 11 under 35 USC 103(a) as being unpatentable over Wilson '800, as set forth in paragraph 12 of the previous action, has been withdrawn in light of the present amendment.
4. The rejection of claim 11 under 35 USC 103(a) as being unpatentable over Trnka '201, as set forth in paragraph 14 of the previous action, has been withdrawn in light of the present amendment.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what Applicant means by removing the film adhesive from perforations *of* the panel in line 14. Applicant is asked to clarify. It is suggested to change this phrase to -- removing the film adhesive from perforations in the panel--.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 11-16 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jessup et al. (US 5938875, of record) in view of Trnka (US 4990201, of record) and/or Wilson (US 4155800, of record).

With respect to claim 11, Jessup teaches a method of reticulating a film adhesive (not shown) onto a perforated panel 16 where the method steps comprise supporting the perforated panel, adhering the film adhesive to the perforated panel without initiating a cure of the film adhesive, applying a vacuum to the film adhesive, softening the film adhesive, moving the perforated panel at a predetermined speed through a reticulation unit, and removing the film adhesive from the perforations by an airflow (Figure 2; abstract; column 3, lines 23-27 and 36-39; column 4, lines 56-60; column 5, lines 14-20; **column 8, lines 29-44 and column 8, line 65 – column 9, line 2**). It is unclear as to whether the reference teaches drying the airflow.

It would have been obvious to dry the airflow and then remove the film adhesive from the perforations by the airflow because it is known in the panel art to heat an adhesive film to adhere the same to a perforated panel without curing the film and then use a dried/heated air flow to reticulate the film (one would appreciate that at least some drying of the air would take place upon heating thereof), as taught by Trnka (column 2, lines 1-28 and 62-66; column 3, lines 5-7) and/or Wilson (column 8, lines 9-15; column 10, lines 52-54), where this expedites the reticulation process.

Regarding claims 12-13, 15-16 and 22, Jessup teaches such.

Art Unit: 1733

Regarding claim 14, one reading Jessup as a whole would have appreciated that the reference is not concerned with a particular means for heating (column 8, lines 28-33) and selection of a particular means would have been within purview of the skilled artisan. However, it would have been obvious to use a radiant heat source because such is known in the art for heating an adhesive film to adhere the same to a perforated panel without initiating cure of the adhesive, as taught by Wilson (column 5, line 57 – column 6, line 11). Selection of a particular radiant heating temperature would have been within purview of one having ordinary skill depending on the type and thickness of the adhesive film.

Regarding claim 18, such would have been obvious to prevent contamination of the adhesive and/or panel by the airflow.

Regarding claim 19, it would have been obvious to heat the airflow because it is known in the panel art to heat an adhesive film to adhere the same to a perforated panel without curing the film and then use a heated air flow to reticulate the film, as taught by Trnka (column 2, lines 1-28) and/or Wilson (column 8, lines 9-15).

Regarding claim 20, such would have been obvious since it is well known and conventional to use shrouds in conjunction with heat source so as to concentrate the heat source and provide more effective/efficient heating.

Regarding claim 21, it would have been obvious to control the airflow because such is known in the art, as taught by Trnka (column 3, lines 35-36), and this prevents damage to the film.

Art Unit: 1733

9. Claims 11-16 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jessup in view of Bourlier et al. (US 6500516, of record) and further in view of Trnka and/or Wilson.

While claim 11 is not limited to the vacuum being used to adhere the film adhesive to the panel without initiating cure of the adhesive, the following rejection is set forth to expedite prosecution:

One reading Jessup as a whole would have appreciated that the reference is not concerned with a particular means for adhering/tacking the adhesive to the panel without initiating cure of the adhesive before reticulation of the adhesive takes place (column 8, lines 29-40); therefore, it would have been obvious to adhere/tack the adhesive to the panel without initiating cure of the adhesive by applying heat and vacuum to the film adhesive because it is known in the structural panel art to adhere an adhesive film to a panel without initiating a cure of the adhesive by applying heat and vacuum to the adhesive and then eventually bond the adhesive/panel pre-laminate to other layers, including a honeycomb layer, to form the finished panel, as taught by Bourlier (note adhesive film 4 and layer 5 later bonded to honeycomb 10; Figures 2-3; column 1, line 11; column 4, lines 47-54; column 5, line 62 – column 6, line 23; column 6, line 29 – column 7, line 3), where vacuum allows the application of uniform pressure and therefore better adhesion/tack between the adhesive film and panel.

10. Claims 11-16, 18-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson in view of Jessup.

With respect to claim 11, Wilson teaches a method of reticulating a film adhesive 10 onto a perforated panel 12 (note present claim language does not exclude the “perforated panel” being

Art Unit: 1733

a honeycomb core) where the method steps comprise supporting the perforated panel, adhering the film adhesive to the perforated panel without initiating a cure of the film adhesive, softening the film adhesive, moving the perforated panel at a predetermined speed through a reticulation unit, drying/heating an airflow (one would appreciate that at least some drying of the air would take place upon heating thereof) and removing the film adhesive from the perforations by the airflow (Figure 8; abstract; column 2, lines 45-64; column 3, lines 13-32; column 4, lines 7-17 and 25-29; column 5, lines 35-37; column 5, line 57 – column 6, line 11; column 6, lines 38-45; column 8, lines 6-15; column 10, lines 52-54).

It is unclear as to whether the reference teaches applying a vacuum to the film adhesive. After reticulation of the adhesive film, Wilson places facing sheets on both sides of the honeycomb core and then heats the assembly to cure the adhesive and form the finished panel (column 7, lines 15-20). It would have been obvious to perform this heating/curing step in an autoclave where a vacuum bag applies vacuum to the assembly during the heating/curing to press the assembly and prevent air/bubbles from being trapped between the layers because such is known in the art, as taught by Jessup (column 8, line 28 – column 9, line 2).

Regarding claims 12-16, 19 and 22, Wilson or Wilson in view of Jessup teach these limitations.

Regarding claim 18, such would have been obvious to prevent contamination of the adhesive and/or panel.

Regarding claim 20, such would have been obvious since it is well known and conventional to use shrouds in conjunction with heat source so as to concentrate the heat source and provide more effective/efficient heating.

Art Unit: 1733

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson and Jessup as applied to claim 11 above, and further in view of Trnka.

Regarding claim 21, it would have been obvious to control the airflow because such is known in the art, as taught by Trnka (column 3, lines 35-36), and this prevents damage to the film.

12. Claims 11-16 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trnka in view of Jessup and further in view of Wilson.

With respect to claim 11, Trnka teaches a method of reticulating a film adhesive onto a perforated panel where the method steps comprise supporting the perforated panel, adhering the film adhesive to the perforated panel without initiating a cure of the film adhesive, softening the film adhesive, placing the perforated panel in a reticulation unit, drying/heating an airflow (one would appreciate that at least some drying of the air would take place upon heating thereof) and removing the film adhesive from the perforations by the airflow (abstract; column 1, lines 5-7; column 1, line 65 – column 2, line 32; column 2, lines 62-66).

It is unclear as to whether the reference teaches applying a vacuum to the film adhesive and moving the perforated panel at a predetermined speed through the reticulation unit.

After reticulation of the adhesive film, Trnka places another substrate on the reticulated adhesive film and then heats the assembly to cure the adhesive and form the finished panel (column 2, lines 28-32). It would have been obvious to perform this heating/curing step in an autoclave where a vacuum bag applies vacuum to the assembly during the heating/curing to press the assembly and prevent air/bubbles from being trapped between the layers because such is known in the art, as taught by Jessup (column 8, line 28 – column 9, line 2).

Art Unit: 1733

One reading Trnka as a whole would have appreciated that the reference is mainly concerned with applying the adhesive film to the perforated panel and performing reticulation thereof as opposed to applying the adhesive film to the honeycomb core and therefore is not concerned with a particular apparatus for carrying out the reticulation. Therefore, it would have been obvious to move the perforated panel through a reticulation unit at a predetermined speed because such is known in the art as taught by Jessup (column 8, lines 33-37) and/or Wilson (column 3, lines 22-23; column 6, lines 38-45).

Regarding claims 12-13, 15-16, 19 and 21-22, Trnka (note previously cited portions of reference and column 3, lines 35-36) or Trnka in view of Jessup and Wilson teach these limitations.

Regarding claim 14, one reading Trnka as a whole would have appreciated that the reference is not concerned with a particular means for heating (column 2, lines 1-5) and selection of a particular means would have been within purview of the skilled artisan. However, it would have been obvious to use a radiant heat source because such is known in the art for heating an adhesive film to adhere the same to a perforated panel without initiating cure of the adhesive, as taught by Wilson (column 5, line 57 – column 6, line 11).

Regarding claim 18, such would have been obvious to prevent contamination of the adhesive and/or panel.

Regarding claim 20, such would have been obvious since it is well known and conventional to use shrouds in conjunction with heat source so as to concentrate the heat source and provide more effective/efficient heating.

Art Unit: 1733

13. Claims 11-16 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trnka in view of Bourlier, also in view of Jessup and further in view of Wilson.

While claim 11 is not limited to the vacuum being used to adhere the film adhesive to the panel without initiating cure of the adhesive, the following rejection is set forth to expedite prosecution:

One reading Trnka as a whole would have appreciated that the reference is not concerned with a particular means for adhering/tacking the adhesive to the panel without initiating cure of the adhesive before reticulation of the adhesive takes place (column 2, lines 1-9); therefore, it would have been obvious to adhere/tack the adhesive to the panel without initiating cure of the adhesive by applying heat and vacuum to the film adhesive because it is known in the structural panel art to adhere an adhesive film to a panel without initiating a cure of the adhesive by applying heat and vacuum to the adhesive and then eventually bond the adhesive/panel pre-laminate to another substrate to form the finished panel, as taught by Bourlier (note adhesive film 4 and layer 5 later bonded to honeycomb 10; Figures 2-3; column 1, line 11; column 4, lines 47-54; column 5, line 62 – column 6, line 23; column 6, line 29 – column 7, line 3), where vacuum allows the application of uniform pressure and therefore better adhesion/tack between the adhesive film and panel.

Allowable Subject Matter

14. Claim 23 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Art Unit: 1733

With respect to claim 23, the prior art fails to teach or suggest a method for panel and film adhesive reticulation wherein the reticulation unit includes a contour head having a nozzle therein for directing airflow and the panel being in contact with the contour head.

Response to Arguments

15. Applicant's arguments filed 3/10/06 have been fully considered but they are not persuasive.

16. Applicant argues that Jessup fails to teach the step of drying the airflow and then removing the film adhesive from the perforation by the airflow.

The examiner invites Applicant to reread the rejection set forth in paragraph 8 above.

17. It is noted that Applicant did not traverse the official notice taken by the Examiner in the previous action with respect to claims 18 and 20; therefore, Applicant has acquiesced and the Examiner's official is made final (see MPEP 2144.03(c)).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **571-272-1223**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**JESSICA ROSSI
PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read "Jessica Rossi", written in a cursive style.